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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Jean-Charles Mercier

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09/22/2004

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EXAMINER

GONZALEZ, JULIO C

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/653,408

Applicant(s)

MERCIER ET AL.

Examiner

Julio C. Gonzalez

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-10 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-3 and 5-9 is/are rejected.
7) ☒ Claim(s) 10 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sperry in view of Utsunomiya et al (US 4,442,371).

Sperry discloses a wind power generator pod having a rigid fairing 1 in which generators 4 and 5 are disposed, a wind propeller 9 and the stator of the generators 4 and 5 contact the fairing 1 (see figure 1). Moreover, Sperry discloses that the pod have change direction or swivel at the end of mast 14 (see lines 92-94, 100-103 & figures 1, 3, 9).

However, Sperry does not disclose that the stator has lateral openings extending through the stator.

On the other hand, Utsunomiya et al discloses for the purpose of improving the construction of a cooling ventilation flue for a stator, an electrical machine having lateral openings 4, 5 extending through the stator 2 (see figure 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a wind power generator as disclosed by Sperry and to modify the invention by having a stator with lateral openings for the purpose of improving the construction of a cooling ventilation flue for a stator as disclosed by Utsunomiya et al.

3. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sperry and Utsunomiya et al as applied to claim 1 above, and further in view of Carter, Jr. et al.

The combined wind power generator discloses all of the elements above. However, the combined wind generator does not disclose having a gearbox.

On the other hand, Carter, Jr. et al discloses for the purpose of obtaining maximum benefit from a wind driven generator, a wind-power generator (see figures 1 and 2) in which a generator 34 is inside a pod and coupled to a propeller 14 and the generator 34 is coupled to a gearbox 36 inside the pod.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined wind power generator as disclosed above and to modify the invention by attaching a gear to the generator for the

purpose of obtaining maximum benefit from a wind driven generator as disclosed by Carter, Jr. et al.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sperry and Utsunomiya et al as applied to claim 1 above, and further in view of Benoit.

The combined wind power generator discloses all of the elements above. However, the combined wind power generator does not disclose using a tubular sleeve around the pod.

On the other hand Benoit discloses for the purpose of taking advantage of high wind speeds thus improving efficiency of the wind power generator that the pod 58 is surrounded by a tubular sleeve forming an annular air passage along the pod (see figures 2 and 3).

It would have been obvious to one having ordinary skill in the art to design the combined wind generator as disclosed above and to make a tubular sleeve surrounding the pod for the purpose of taking advantage of high wind speeds thus improving efficiency of the wind power generator as disclosed by Benoit.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sperry and Utsunomiya et al as applied to claim 1 above, and further in view of Rao.

The combined wind power generator discloses all of the elements above. However, the combined wind power generator does not disclose that a stator may be attached to a fairing by interference fit.

On the other hand, Rao discloses for the purpose of increasing the efficiency of the generator assembly and keeping the generator laminations firmly in place during generation operation, a stator 15, which is assembled into the housing 13 with an interference fit (column 4, lines 30-31 & see figure 2).

It would have been obvious to one having ordinary skill in the art to design the combined wind generator as disclosed above and to have an interference fit between the stator and housing for the purpose of increasing the efficiency of the generator assembly and keeping the generator laminations firmly in place during generation operation as disclosed by Rao.

6. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sperry, Utsunomiya et al and Benoit as applied to claims 1 and 2 above, and further in view of A. J. Piel (US 3,076,510).

The combined wind power generator discloses all of the elements above. However, the combined wind power generator does not disclose that the tubular sleeve is shorter in length than the fairing.

On the other hand, Piel discloses for the purpose of providing an electrical generator that is economical, durable in use and quickly placed into functioning, a wind type generators that has a sleeve 11 that has an end flared out (see figure 2), a pod, a generator 22 inside the pod (see figure 6) and the sleeve is shorter in length than the fairing (see figures 6 and 2).

It would have been obvious to one having ordinary skill in the art to design the combined wind generator as disclosed above and to have a tubular sleeve shorter in length than the fairing for the purpose of providing an electrical generator that is economical, durable in use and quickly placed into functioning as disclosed by Piel.

Response to Arguments

7. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found

either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Sperry discloses the use of wind turbine having a generator contacting the fairing. Such design is well known in the art (see also reference of A.J. Piel, figures 2, 6). Also, Utsunomiya et al discloses that it is desirable to have cooling air circulating through the stator to enhance the cooling effect in the machine (see abstract). Another reference that teaches that is well known in the art to exposed the stator of a generator in wind power turbine is Hutter (US 2,655,604). In figure 1 of such reference the stator is clearly exposed to ambient air, thus anyone with ordinary skill in the art would be motivated to design a wind generator as disclosed by Sperry and to enhanced the cooling efficiency of generators as disclosed by Utsunomiya et al.

With respect to claim 2, respectfully, the claim discloses that a fairing is surrounded by a tubular sleeve forming an air passage between the fairing and the sleeve. What Benoit teaches is that is known to make annular air passages in wind turbine machines and such air passages make improvements to such devices. A. J. Piel also discloses air passages between a fairing and a tubular sleeve (see figure 4), thus such limitation is well known in the art.

8. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the ability to direct hot air, created within the pod, to the fairing so that conduction is permitted between the pod and the ambient flowing air) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

9. Applicant's arguments with respect to claims 8 and 9 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

10. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to disclose, in combination with all the intervening limitations, that the end portion of the tubular sleeve portion that is flared outwardly is disposed towards an end of the fairing which is opposite the wind driven propeller.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is 571-272-2024. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jcg

September 16, 2004



Nicholas Ponomarenko
Primary Examiner
Technology Center 2800